



GPRS Set-up for Apple Macintosh

This guide will help you with setting up an Apple Macintosh for a GPRS connection to **O₂ Mobile Web...**

Recommended System Requirements:

MacOS 8.6 through to 9.2.x

MacOS X 10.2.x

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Guidelines and connectivity options for GPRS access...

IMPORTANT: Before you begin, please be aware that this guide is provided on a 'best endeavours' basis. Whilst the information contained within this guide may prove helpful for Apple Macintosh GPRS connectivity to the O2 network, it cannot however be guaranteed.

Connectivity options

There are 4 connectivity options open to the Mac user for GPRS access to O2 Mobile Web – Bluetooth, Infrared, USB and Type II PCMCIA GPRS cards.

This of course, is dependant on what your particular Mac computer supports.

Infrared

The latest Apple Powerbooks and iBooks do not have Infrared functionality built in, although if you have an earlier model, you may find that you do have Infrared functionality.

Bluetooth

Bluetooth is also supported on the latest Macs – either built-in (if you have one of the latest models), or by way of a 'Bluetooth USB adapter'. There are various Bluetooth USB adapters available, and they all offer similar functionality – ie. plug and play without the need for USB drivers etc., but please check with the Bluetooth adapter manufacturer for any possible set-up instructions for your particular device.

Whichever Bluetooth type that you have, this will only work in Mac OS X 10.2 or above, as Bluetooth functionality is built directly into the operating system itself. You will be unable to use Bluetooth if you are running classic Mac OS9 etc.

For a connection to work over Bluetooth, you will need to create a secure link between your Mac and mobile device – this is termed as 'pairing' or 'bonding'. For instructions on how to pair your devices, see page 21.

USB

USB connectivity solutions are currently available from a wide variety of 3rd party vendors. These options allow users, who do not have either infrared or Bluetooth capability on their Mac, to create a GSM/GPRS connection by way of a USB cable, connected between their Mac and a mobile device.

USB solutions are normally supplied as a complete package, usually comprising of a USB cable + CD containing modem drivers/scripts developed specifically for use with the supplied cable and a particular mobile device. If you are using one of these packages, then you will need to follow the manufacturer's instructions for installation and configuration. If however, you are experiencing connectivity problems using this product, then you will need to contact the manufacturer directly for advice with your problem.

PCMCIA GPRS Cards

There are various GPRS cards available on the market – please check for compatibility for use with your Mac before purchasing. One such card is the GlobeTrotter card from Option International.

For more information and support for this product visit: www.option.com or www.novamedia.de

Setting up your mobile device

In order to create a GPRS connection it will be necessary to enter an Access Point Name (APN) on your mobile device (this may not be the case if you are using a 3rd party USB solution – please refer to the manufacturer's instructions if this is the case).

On current GPRS handsets, it may be possible to enter a data account for the GPRS Modem settings directly on the handset – please be aware that this is dependant on the device being used.

This GPRS data account could then be referenced by a GPRS dial-up number.

There are 2 ways of implementing a GPRS dial-up number:

- *99# - this means "make GPRS connection using default Context ID [CID1]"
- *99***1# - this means "make GPRS connection using Context ID 1"

Sony Ericsson

On Sony Ericsson GPRS handsets, create and set up a new O2 Mobile Web GPRS data account and make a note of the CID number (this can be found by going back into the account after firstly creating and saving it) – then enter the dial-up number as ***99***1#** (Replace the '1' with whatever the data account CID is).

Nokia

For Nokia GPRS handsets, enter a new GPRS Access Point in the GPRS Modem Settings and make it Active. This works slightly differently on the Nokia. Because the data account is actually activated (unlike Sony Ericsson data accounts), it is possible to reference it by entering ***99#** only (references the default account). On the Nokia (dependant on which particular model you have), select either:

Menu > Settings > GPRS Modem Settings

Menu > Connectivity > GPRS > GPRS modem settings

Enter a new active access point by selecting 'Active Access Point' > press 'Select' > choose an Access Point and press 'Activate'. Now scroll down and select 'Edit active access point'. Rename the Alias to something like 'MobileWeb'. Now scroll down again to 'GPRS access point' and press 'Edit' and enter **mobile.o2.co.uk** and then press OK.

(NOTE: This process may not apply to all Nokia devices – please consult your User Manual for more information).

Siemens and Motorola

There are currently no Mac GPRS drivers available for Siemens and Motorola except possibly through 3rd party developers. There are however Mac USB modem drivers available, but these can normally only be obtained when purchasing specific 3rd party USB cables for the device (see USB connectivity options on page 2 for more information). If you have one of these, then you will need to check with the manufacturer for modem driver compatibility for MacOS9.x and MacOSX (normally 2 separate drivers may be available).

Other GPRS handset manufacturers

You may need to check with the handset manufacturer for Mac drivers... if there are none available, then there may be 3rd party drivers / USB cables available via the Internet...

3rd party Modem Scripts

You may find that one of the modem scripts which are installed as part of MacOS & OS X are suitable for a GPRS connection, but this is dependant on the mobile device that you are using.

If the supplied modem scripts are unable to create a GPRS connection, then you may find an extensive range of 3rd party modem scripts at www.taniwha.org.uk

From this location, download the modem scripts for your particular device and follow the informative instructions in the enclosed 'Read Me' file.

In MacOS X, setup usually consists of dragging the appropriate script into your top level Library > Modem Scripts folder. The only important difference when using these scripts, is to make sure that you change the Phone number in your PPP settings.

In the phone number field enter: MOBILE.O2.CO.UK – this is in place of *99# that you may have been using previously. It will not be necessary to enter or change any settings on your mobile device for this to work.

Finally, within the Modem settings for either your Infrared or Bluetooth connection, select the recommended Modem script that you have just installed.

For a connection to the O2 network, use the following scripts as a starting point:

Nokia : Nokia GPRS CID1

Sony Ericsson : Ericsson GPRS CID1

Siemens : Siemens GPRS CID1

Motorola : Motorola GPRS CID1

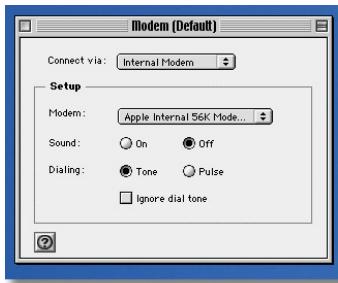
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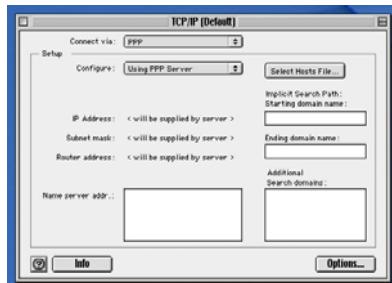
MacOS 8.6 / 9.x set-up

For a 'Dial-up' connection, there are 3 Control panels that you will need to configure...

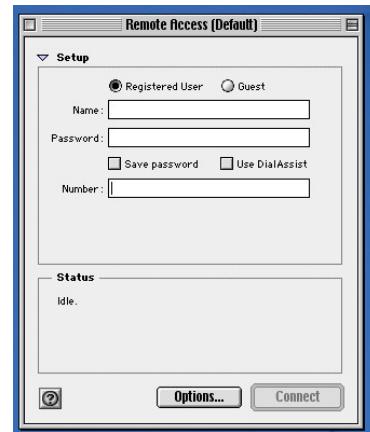
Modem Set-up



TCP/IP

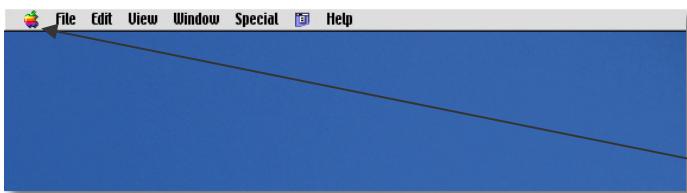


Remote Access

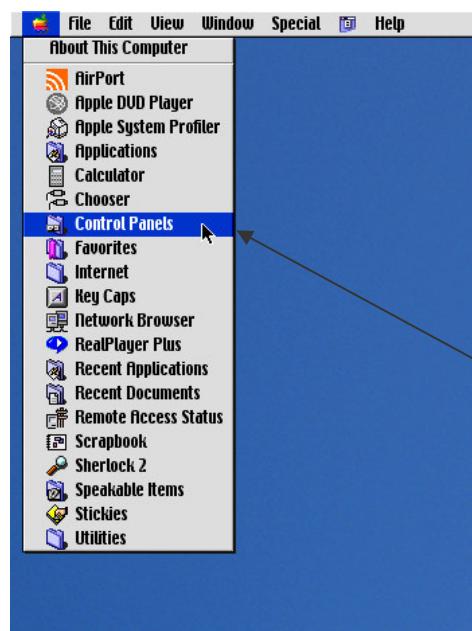


*Please note that the following screenshots are from Mac OS 9.2

How to select Control panels...



Click and hold the Apple menu

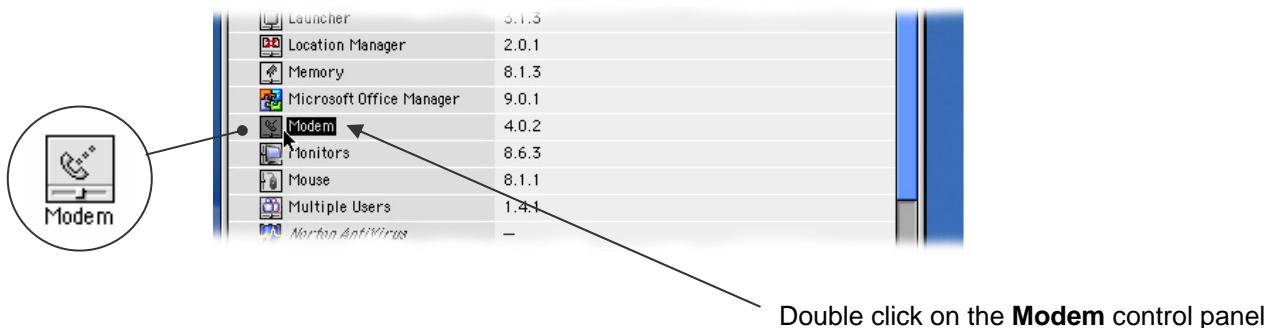


Select Control Panels

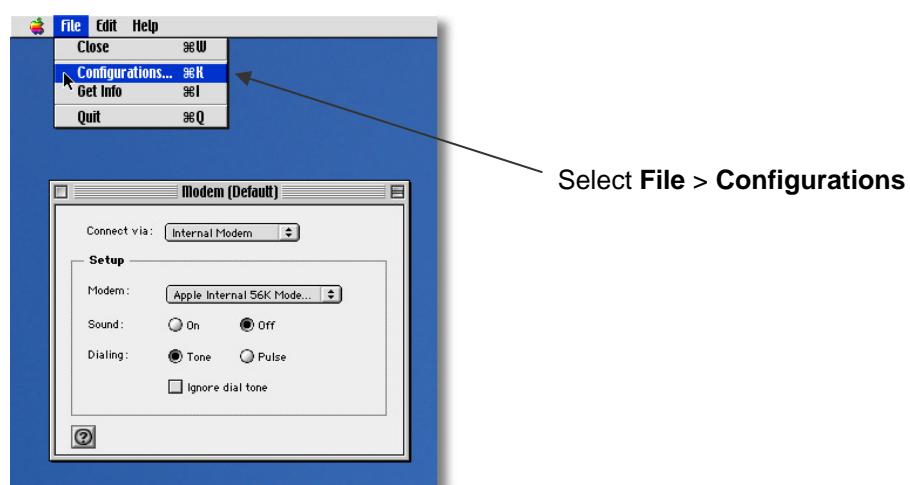
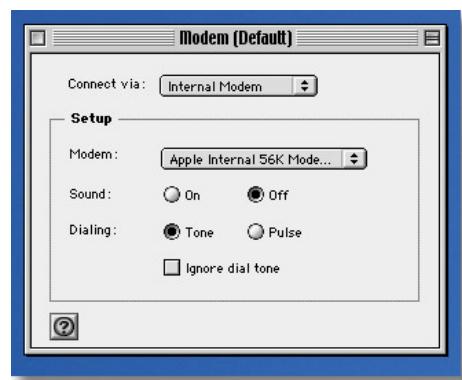
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Modem Set-up



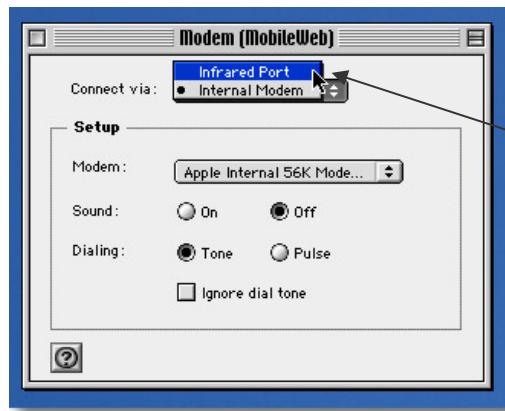
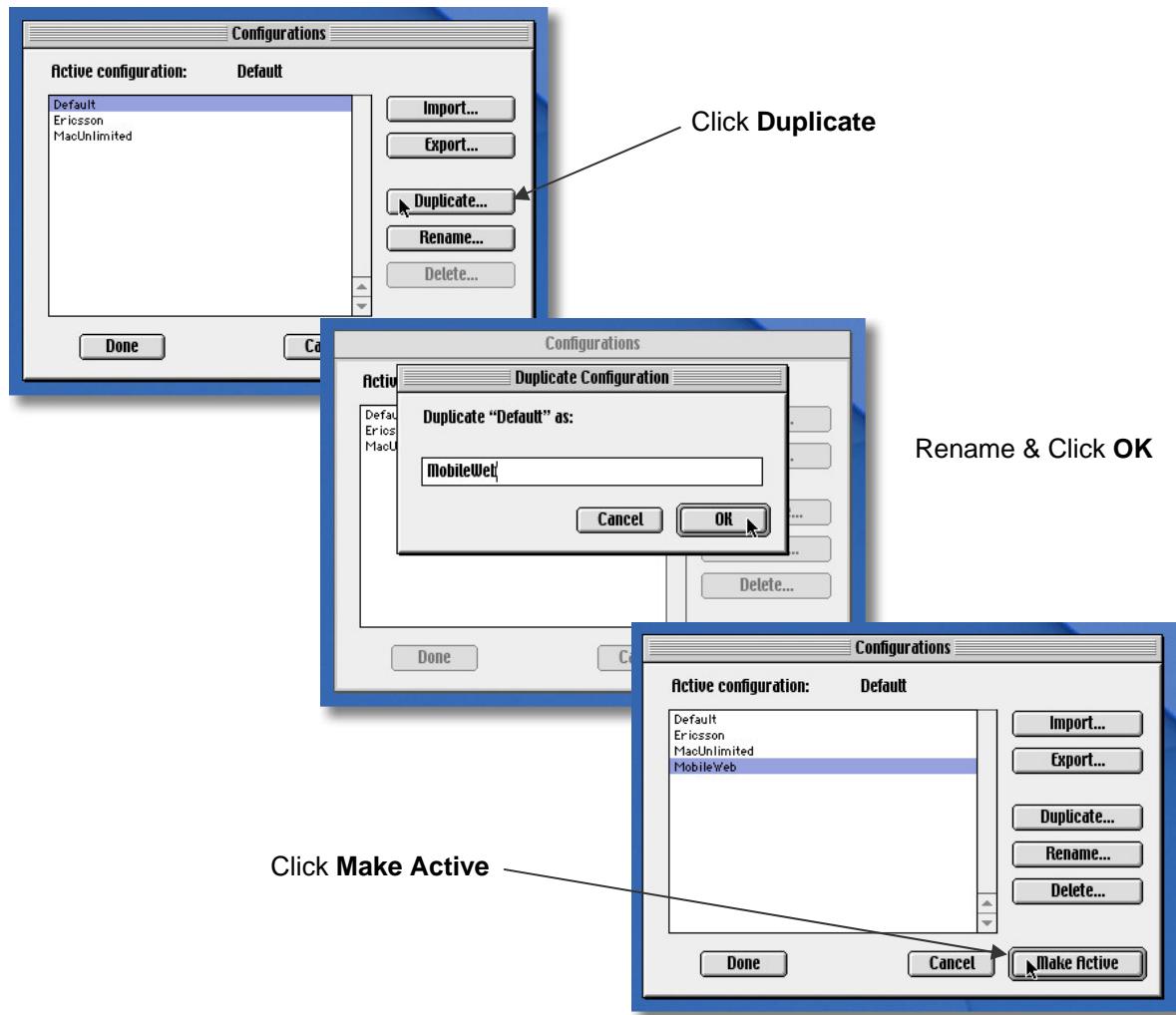
The **Modem** control panel



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Modem Set-up



From the 'Connect via:' drop-down menu, select **Infrared Port**

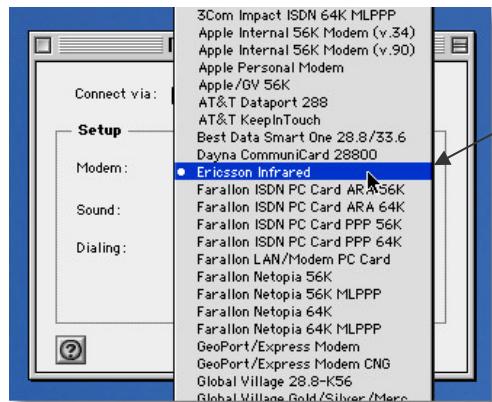
***NOTE 1:** For other connection methods eg. *USB*, then select whatever is being used.. (See Page 2 for more info on alternative connection methods)

***NOTE 2:** If these settings are 'greyed out' and unable to be edited, please follow the instructions on page 15

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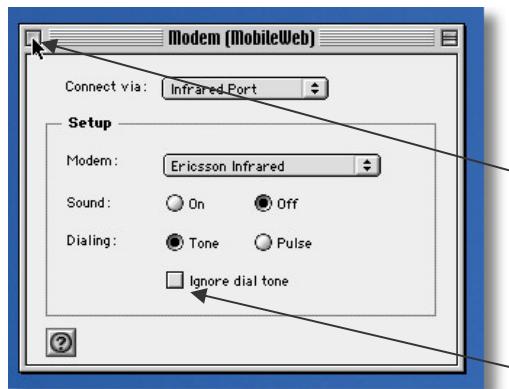
Modem Set-up



From the 'Modem:' drop-down menu, select either **Ericsson Infrared** or **Nokia Infrared**

***Please note:**

If a modem is not listed for your device, or for using other manufacturers GPRS modem devices, please refer to the guidelines on Page 2

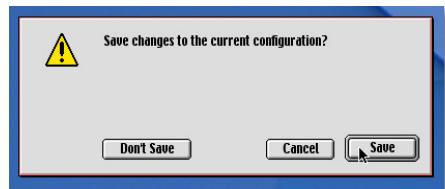


Click the **Close** box

***TIP** – When connecting, if you receive a 'modem not responding' error message, tick the **Ignore dial tone** box and try again...

Click **Save** – the Modem is now set up

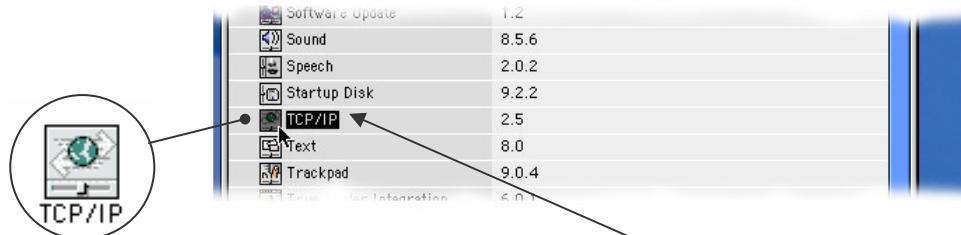
You will now need to configure **TCP/IP...**



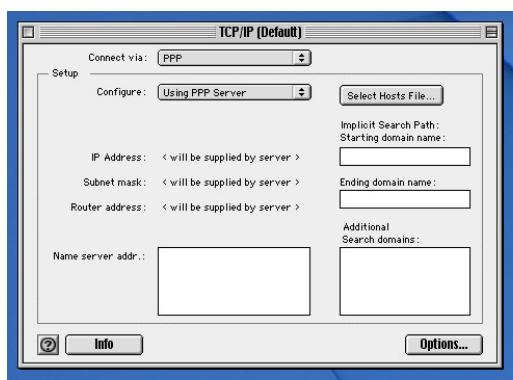
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TCP/IP



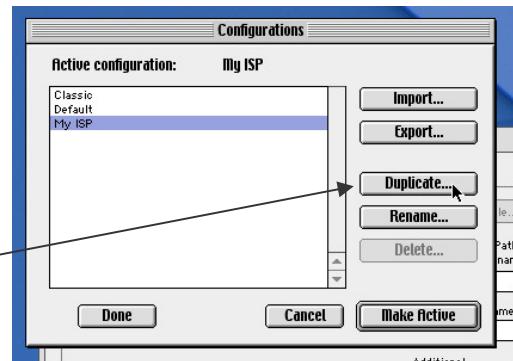
Select **Control panels** and double click on the **TCP/IP** control panel



The **TCP/IP** Control Panel...



Select **File > Configurations**

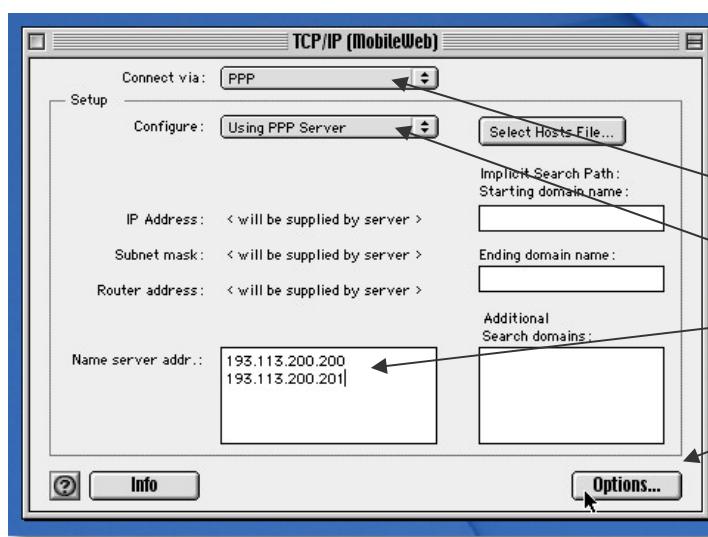
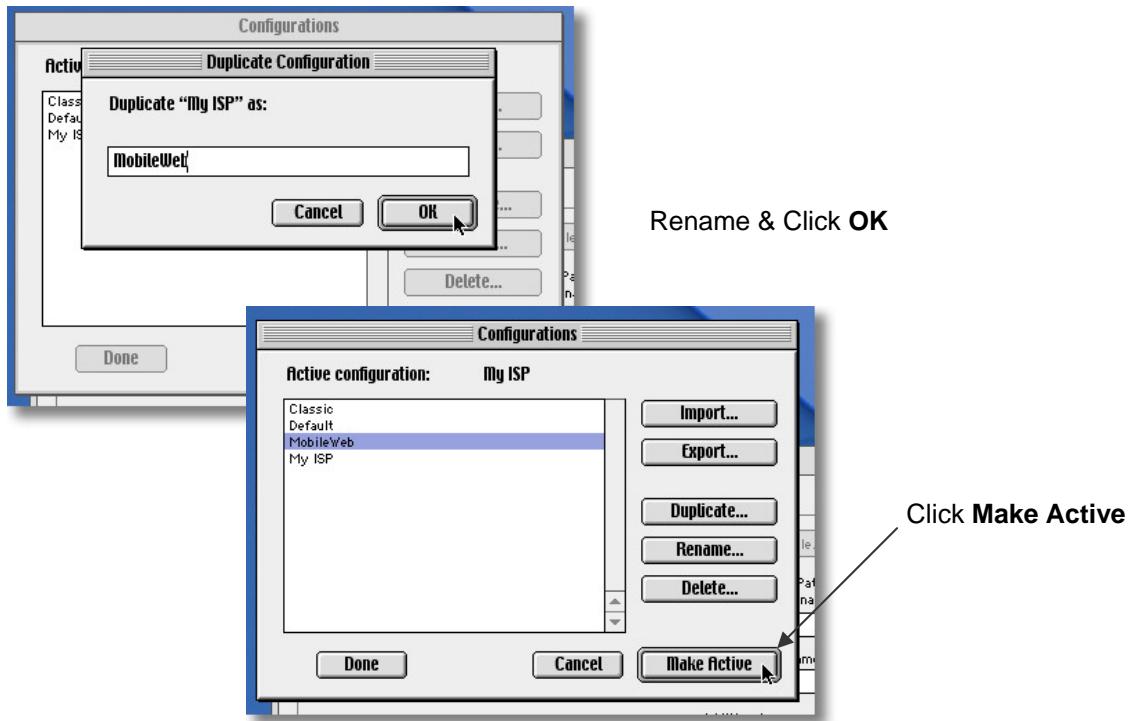


Click **Duplicate**

GPRS Set-up for Apple Macintosh

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TCP/IP



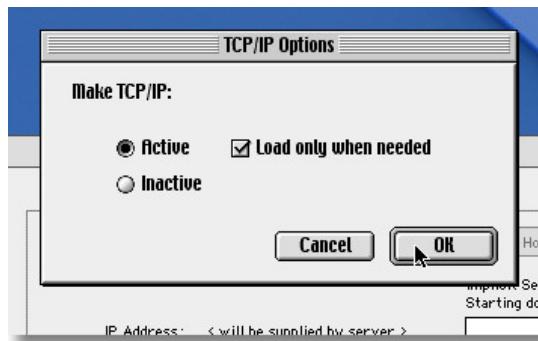
1. From the 'Connect via:' drop-down menu, select **PPP**
2. From the 'Configure:' drop-down menu, select **Using PPP Server**
3. In the 'Name server addr.' box enter:
193.113.200.200
193.113.200.201
4. Click **Options...**

***NOTE:** If these settings are 'greyed out' and unable to be edited, please follow the instructions on page 15

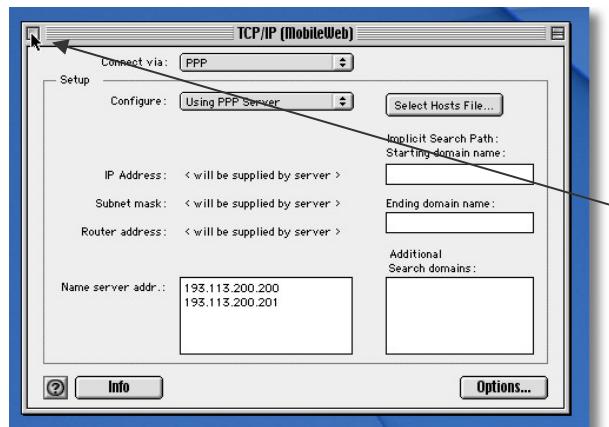
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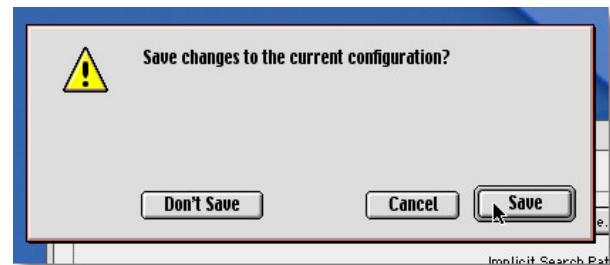
TCP/IP



Check that TCP/IP is Active & Click **OK**



Click the **Close** box



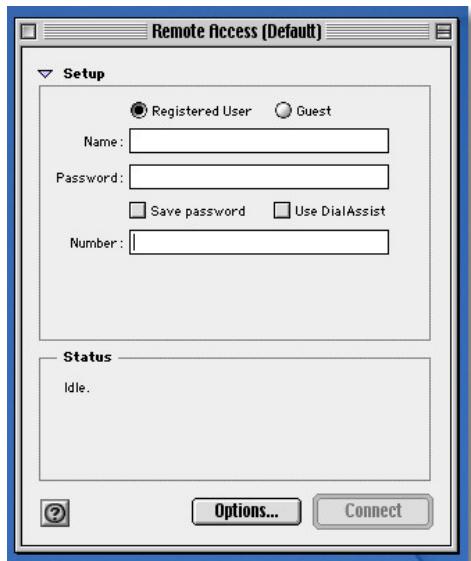
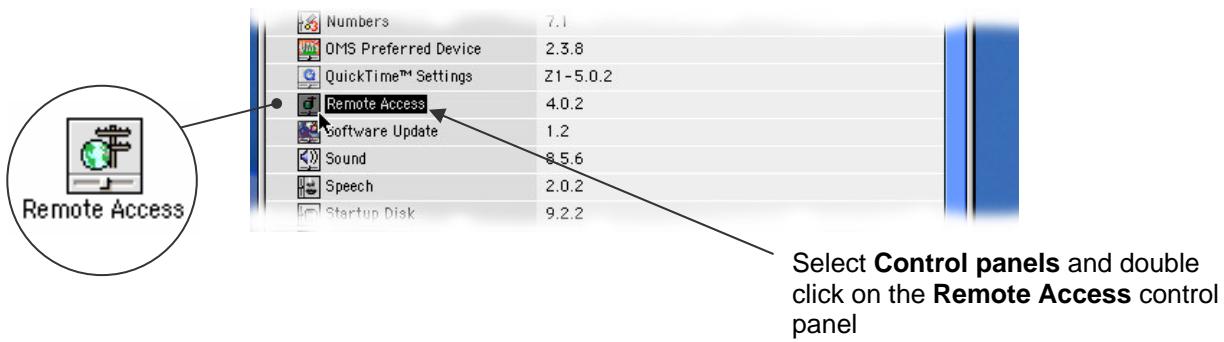
Click **Save** – TCP/IP is now set up

*You will now need to configure **Remote Access**...*

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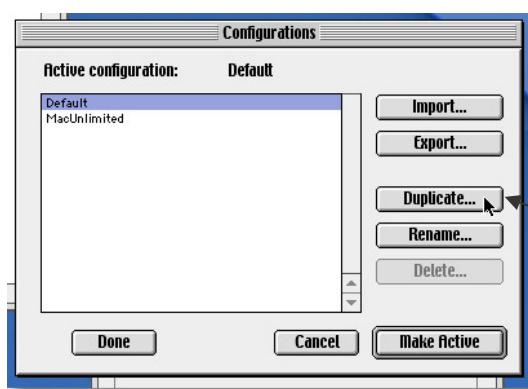
Remote Access



The **Remote Access** Control panel



Select **File > Configurations**

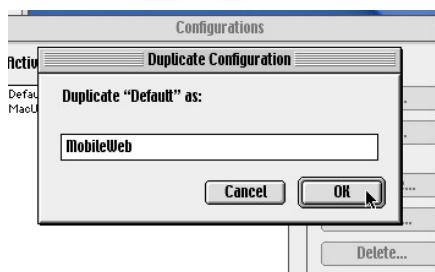


Click **Duplicate**

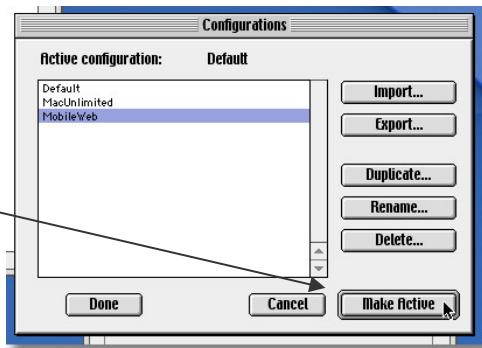
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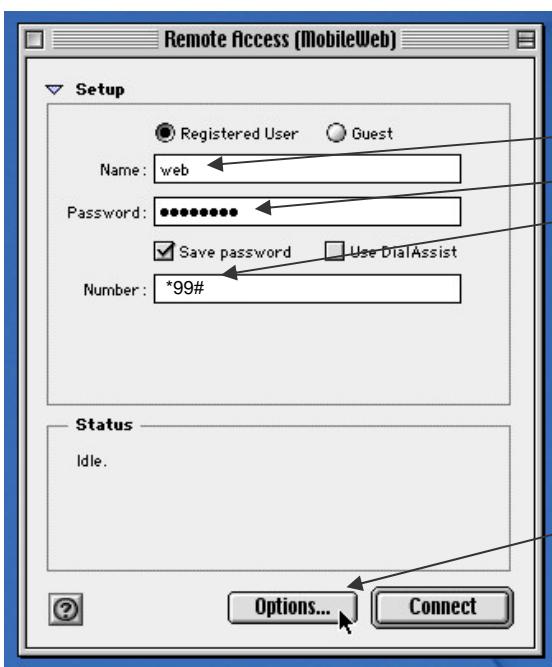
Remote Access



Rename & Click **OK**



Click **Make Active**



1. Enter **web**

2. Enter **password**

3. Enter dialup number ***99#**

IMPORTANT: This number initiates a GPRS connection via the GPRS modem on your mobile phone. You will need to configure your mobile phone with the O2 MobileWeb Access Point Name (APN) in order for this to connect. See the guidelines on Page 2 for more information on using this number with different make/models of mobile phones.

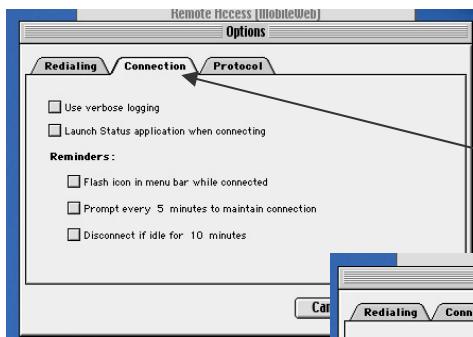
4. Click **Options**

***NOTE:** If these settings are 'greyed out' and unable to be edited, please follow the instructions on page 15

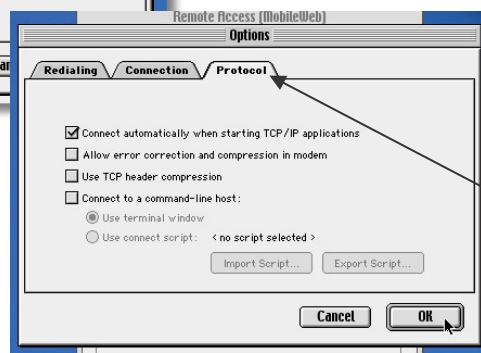
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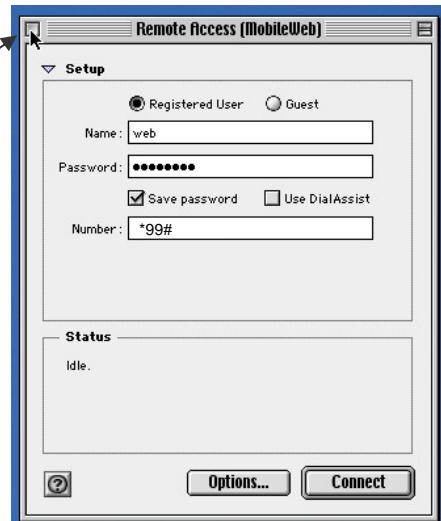
Remote Access



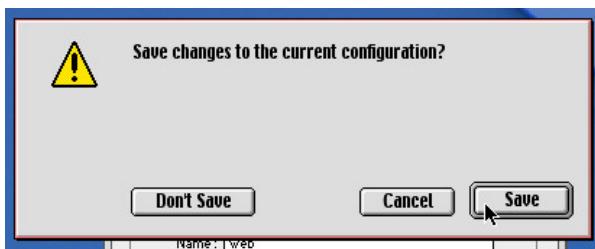
Click the Connection tab and untick all the boxes



Click the Protocol tab and untick all the boxes except the top box, then click **OK**

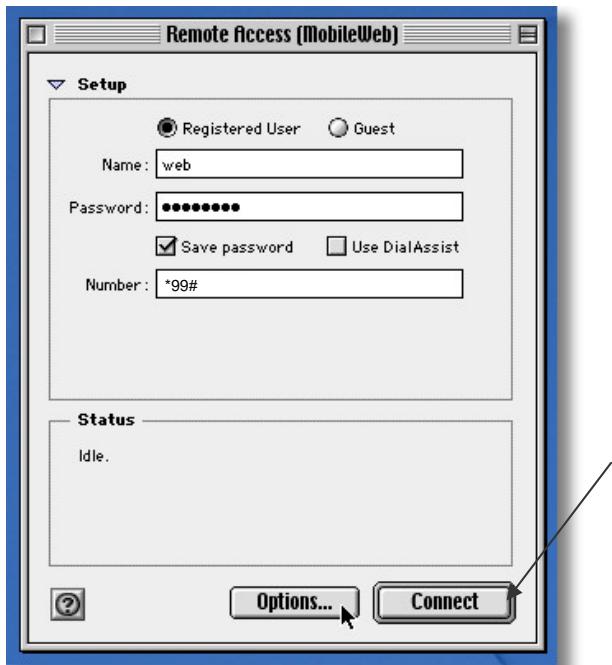


Click the **Close** box



Click **Save** – Remote Access is now set up

Making the connection



Switch on Infrared on the mobile device and line it's IR port up with the IR port on your Mac

Open the **Remote Access** control panel again, as described on page 10, and click on **Connect**

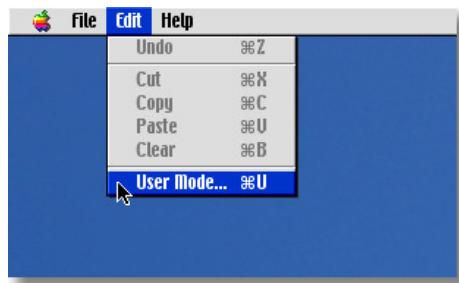
GPRS Set-up for Apple Macintosh



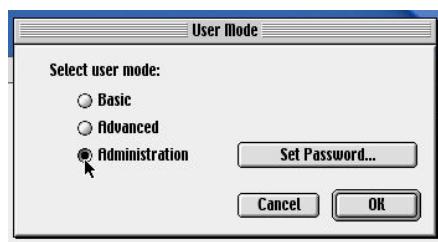
Control panel accessibility



If editing either the Modem, TCP/IP or Remote Access control panel is not possible, (similar to the picture on the left), then carry out the following process...



Select **User Mode** from the Edit menu...

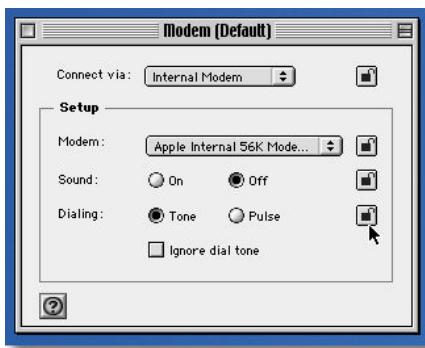


Select **Administration**

(The user will need to enter their password if this has been set)

Click **OK**

In Administration mode, you can see which of the settings are locked...



Click on each 'lock' icon to unlock...

It is now possible to edit the settings

If required, re-lock the settings or change the User Mode back to its original setting..

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MacOS X 10.2.x set-up

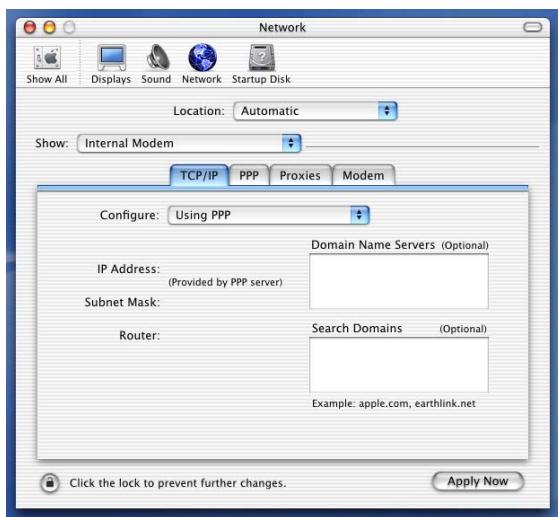
NOTE: This set-up guide for Mac OS X is based on an Infrared connection to the mobile device. Whilst it can be appreciated that not all Macs have Infrared installed, the following configuration guide equally applies to Bluetooth connections...



Select System Preferences from the Apple Menu

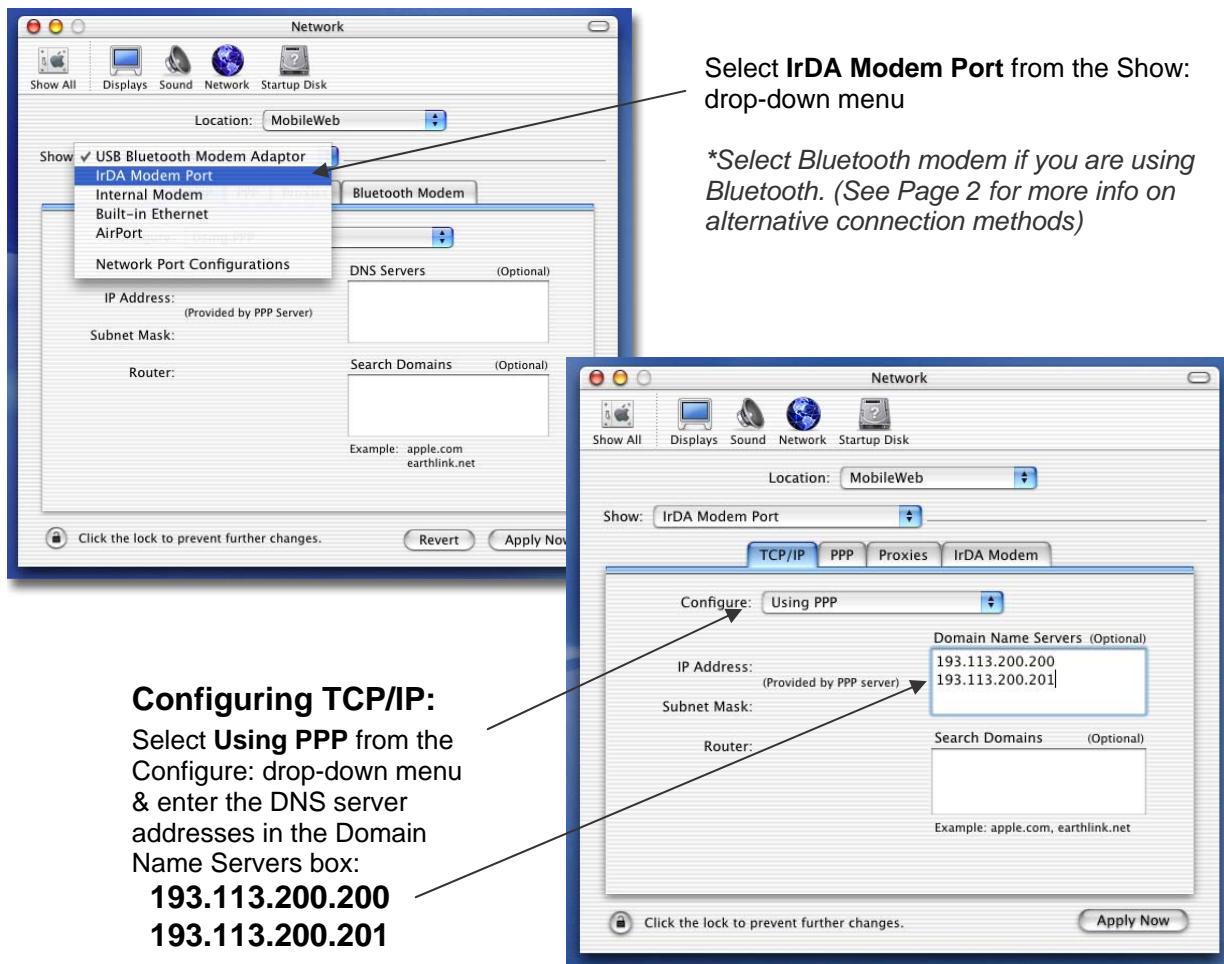
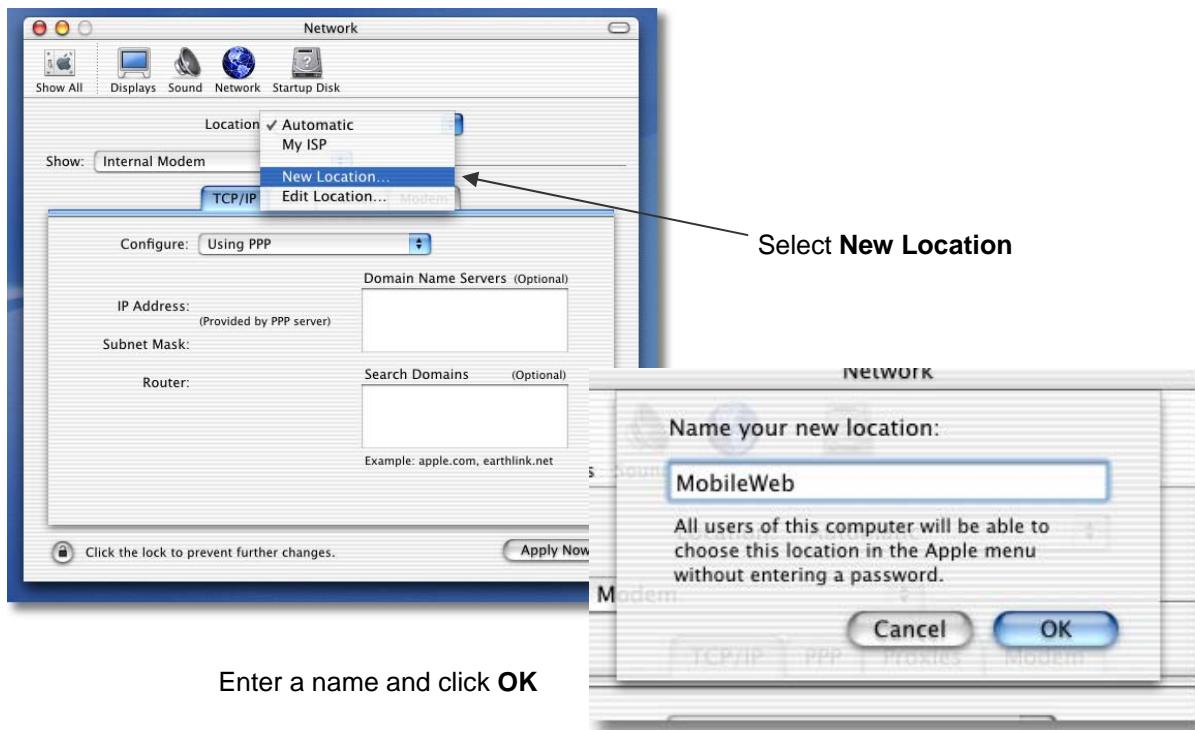


Click on Network



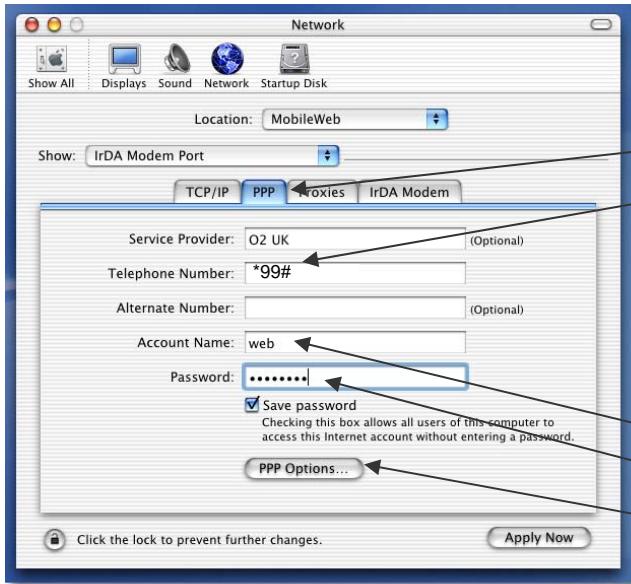
OS X Network Preferences...

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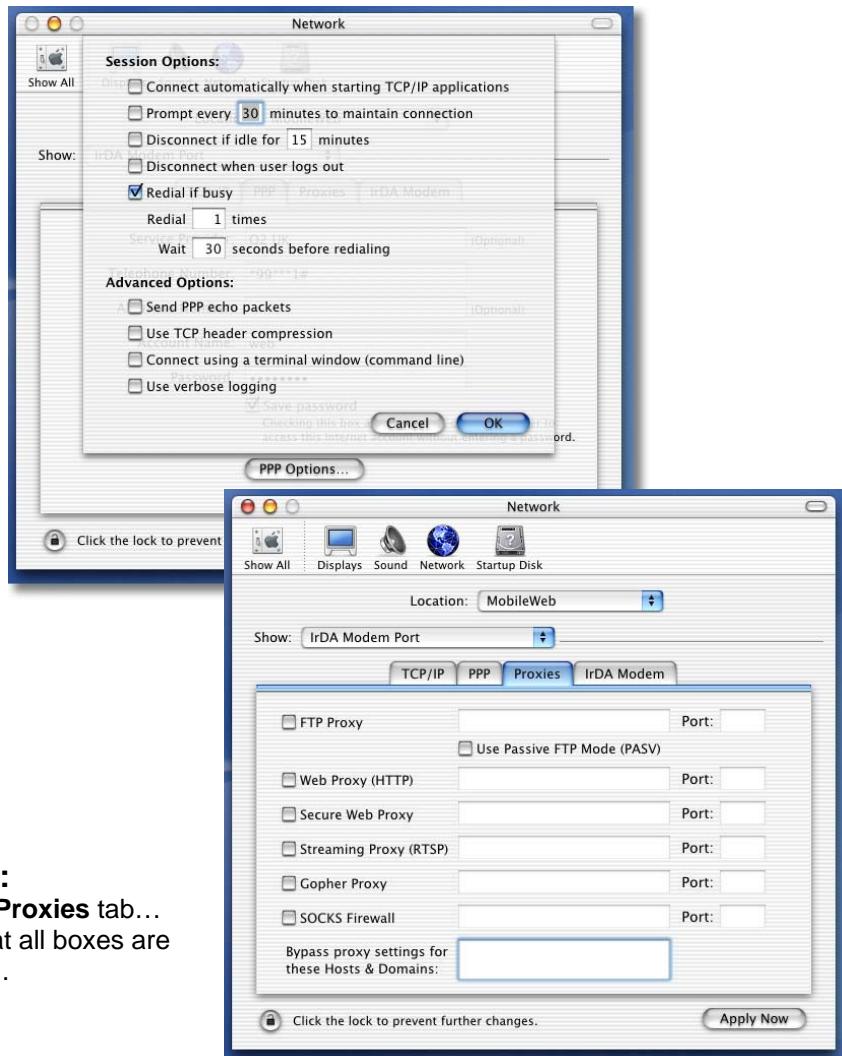


Configuring PPP:

1. Select the **PPP** tab
2. Enter Telephone Number ***99#**

IMPORTANT: This number initiates a GPRS connection via the GPRS modem on your mobile phone. You will need to configure your mobile phone with the O2 MobileWeb Access Point Name (APN) in order for this to connect. See the guidelines on Page 2 for more information on using this number with different make/models of mobile phones.

3. Enter **web**
4. Enter **password**
5. Click **PPP Options...**

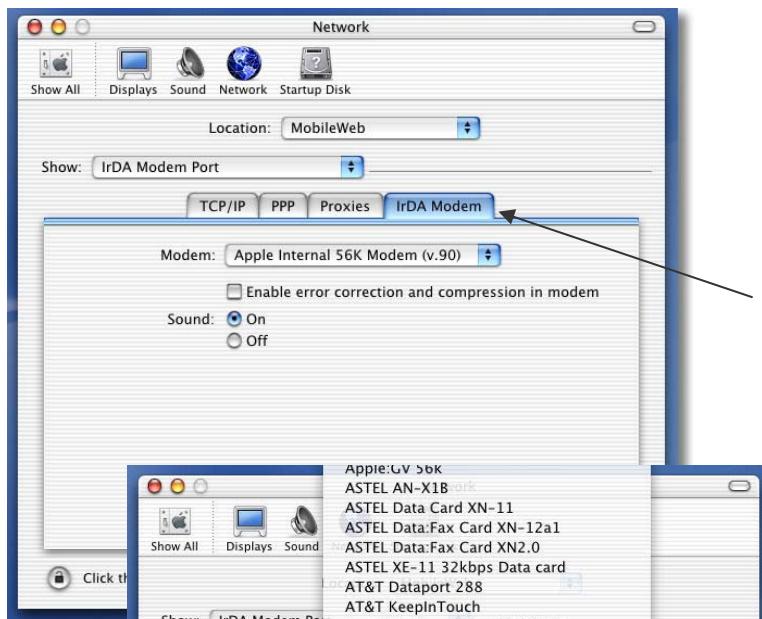


Proxies:

Click the **Proxies** tab...
Check that all boxes are unselected...

GPRS Set-up for Apple Macintosh

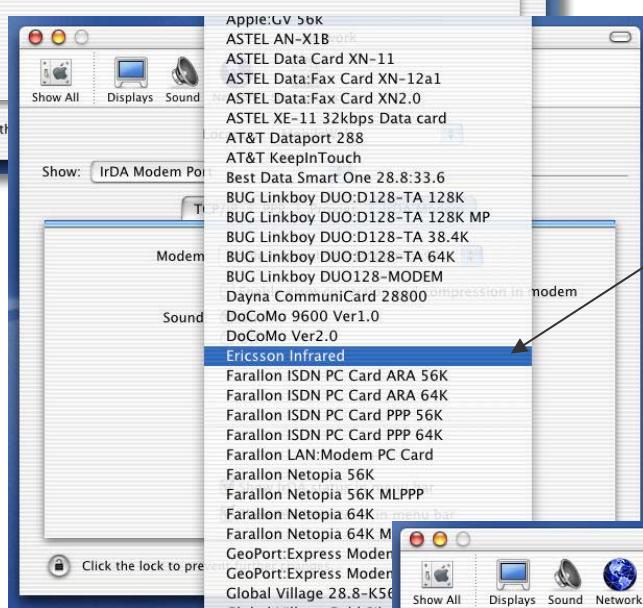
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Modem:

Click the IrDA Modem tab

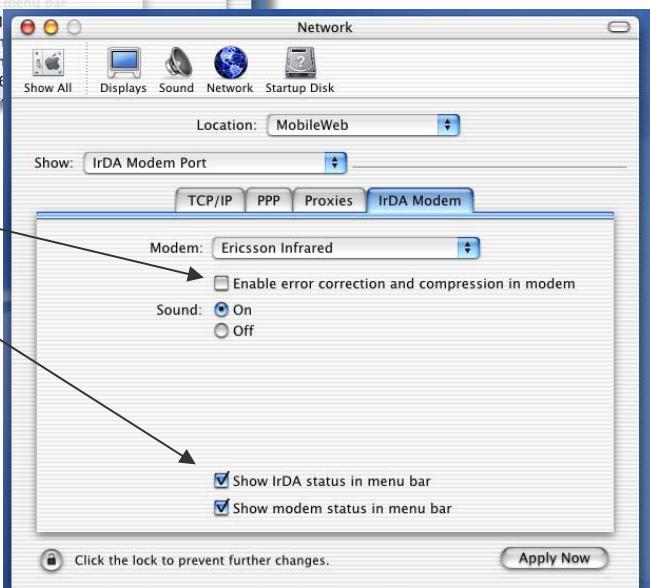
**This will be labelled as 'Bluetooth' if you have chosen to use the Bluetooth Modem...*



From the 'Modem:' drop-down menu, select either **Ericsson Infrared** or **Nokia Infrared** (These modems can also be used when using Bluetooth)

*Please note:

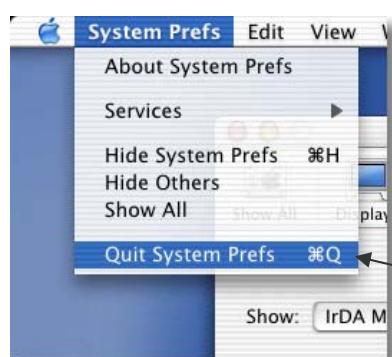
If a modem is not listed for your device, or for using other manufacturers GPRS modem devices, please refer to the guidelines on Page 2



Untick **Enable modem error correction & compression...**

Tick Show IrDA & Modem status in menu bar

Click Apply Now



Click **System Prefs** on the Menu bar & select **Quit...**

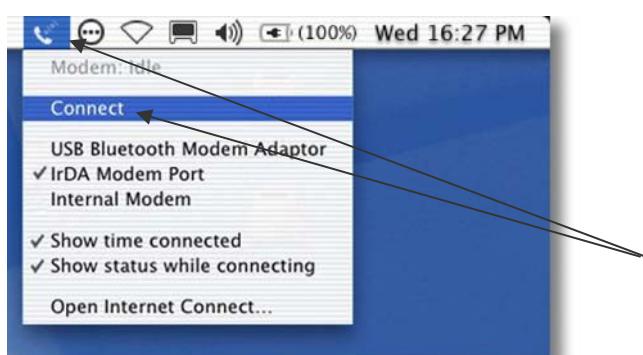
GPRS Set-up for Apple Macintosh



Making the connection



Activate Infrared on your mobile device



Click the IrDA icon on the Menu bar and select **Turn IrDA On**.

The above step can be ignored for Bluetooth connections.

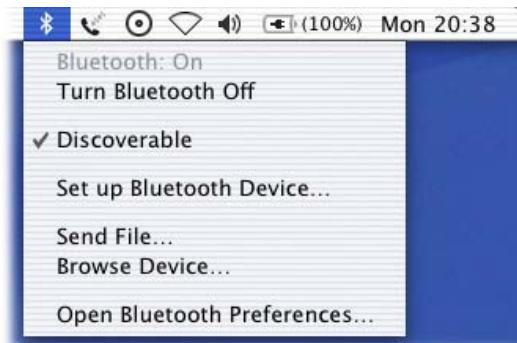
Instead you will need to first 'pair' your mobile device with the Mac (see page 21 for instructions on how to do this) and then select the Bluetooth Modem from the Modem Status menu.

Click the Modem Status phone icon on the Menu bar and select **Connect**

Connecting using Bluetooth

For Bluetooth connections, make sure that Bluetooth is powered on and 'Discoverable'

Follow the pairing instructions on page 21 to pair your Mac with your mobile device.



Once your devices are paired, check that you are connecting via Bluetooth from the Modem Status menu.

Select **Connect**

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Bluetooth pairing

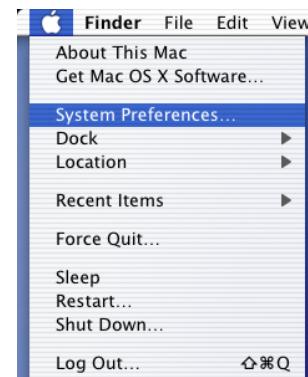
Setting up your mobile device

Check the Bluetooth settings on your mobile device and make sure that Bluetooth is On (or 'Discoverable') and that the device is 'shown to all'. This will ensure that your Mac will be able to detect the device when it's within range. Please check your mobile device user manual if you are unsure how to do this.

Pairing a USB Bluetooth adapter with your mobile device



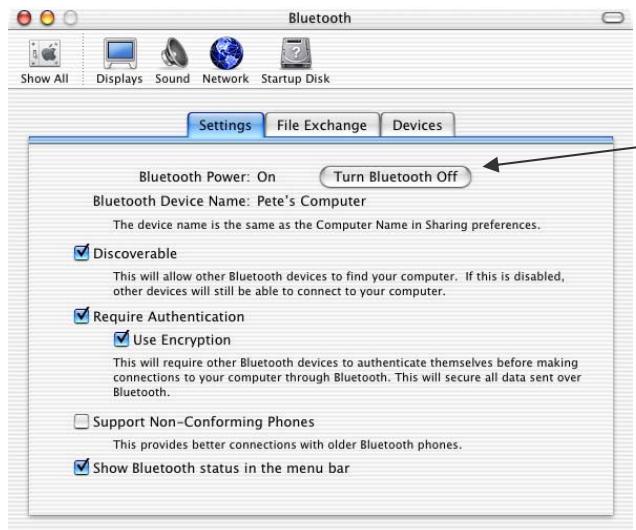
1. Insert the USB Bluetooth adapter into a USB port on your Mac



3. Under Hardware, click on **Bluetooth**

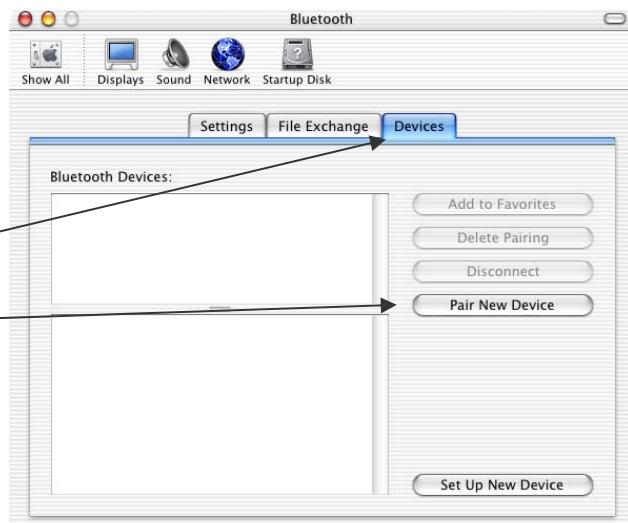
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4. Click the **Settings** tab and make sure that Bluetooth power is turned on.

Check that the 'Discoverable' and 'Show Bluetooth Status in the menu bar' options are ticked. If you require more security, then tick the 'Require Authentication' and 'Use Encryption' boxes.



5. Click the **Devices** tab

6. Click **Pair New Device**



7. Your Mac will now search for any Bluetooth devices within range and when your mobile device is detected, it will show up in the **Device** window

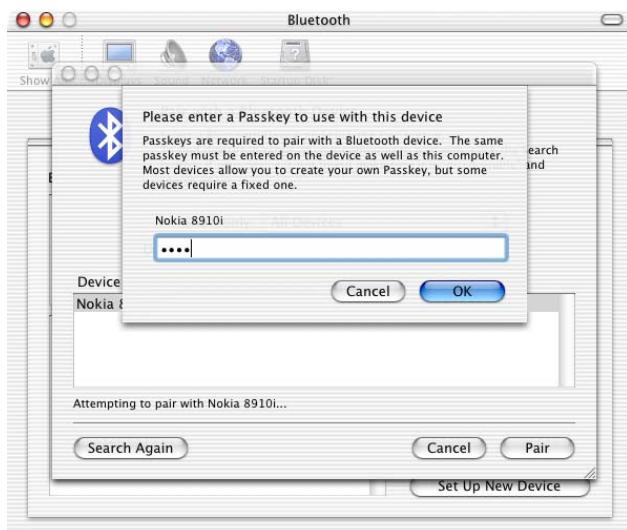
***IMPORTANT** - wait until the search completes before continuing...

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8. Once the search has completed, select the device that you are using eg. Nokia 8910i, and Click on **Pair**.

Your Mac will now attempt to pair with your mobile device.



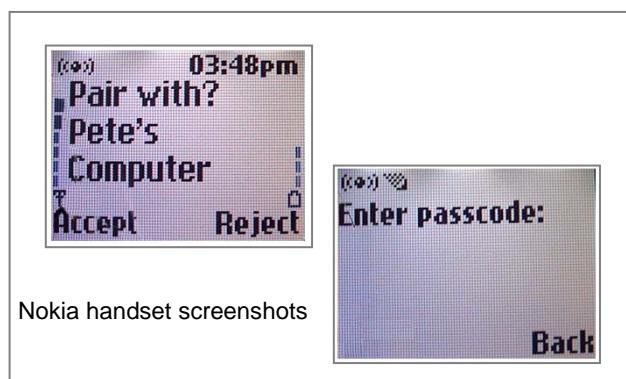
9. When prompted type in a passkey eg. 1234 and click **OK**.

10. Your mobile device will now prompt you to Pair with your Mac.

Depending on which particular mobile device that you are using, you will be prompted to accept the pairing and enter your passcode. *(This is the same passcode that you entered on your Mac)*

IMPORTANT NOTE for Nokia 6310i users:

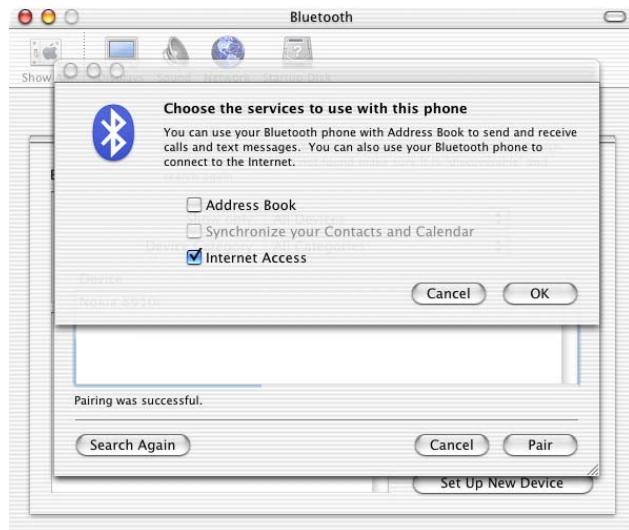
If you receive a 'Disconnected' error message on the device, then disregard this and proceed.



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11. On your Mac, choose **Internet Access** for the service, and click **OK**.



Your Mac is now paired to your mobile device. It will now be possible to create a GPRS connection. See page 20 for information on how to connect.